NEW ENGLAND FARMER.

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Agriculture.

MASSACHUSETTS AGRICULTURAL SOCIETY.

ON THE BEST CULTIVATED FARMS.

BENJAMIN GUILD, ESQ.—

SIR—I wish to offer my farm for premium. It lies in the east part of the town of Pittsfield, upon Boston and Albany stage road, containing two hundred and fifty acres or thereabout. The soil is alluvial and loam; forty acres of it good woodland, principally covered with sugar-maple. I have also, in one square lot, forty acres of meadow, almost perfectly level, and overflowed by the waters of the Housatonic river (by which it is bounded on the east,) in the spring of the year when the snow melts away, generally, and sometimes twice or thrice in the year; so that it never requires any manure; and I have nothing to do but to keep up my fences and cut the grass, which is all of an excellent quality, consisting of herds or timothy, clover, and fine English; has produced this year one hundred and six loads, which we have estimated to weigh one ton each, as we get it in, well made. This lot lies upon the east side of the road, opposite to my house; and the residue of my farm upon the west side of the road, pretty nearly in a square form, a little elevated above the meadow, say eight or ten feet, and rises but little to the western extreme of the farm. I have an orchard lot, consisting of about eighteen acres, which I mow, and which has produced this year twentythree loads, which we have estimated at one ton each, of excellent hay; making in all one hundred and twentynine loads.

The residue of my farm consists of pasturage and tillage, say one hundred and fortyseven acres, all good, which I have improved alternately for pasturage and tillage by a rotation of crops; first for wheat or rye, then corn, then oats or other spring grain, with clover and grass. I have improved it the present season as follows: Of winter crops twenty acres, called, but if accurately measured would fall a little short of that quantity; it has, however, produced 4568 sheaves, 900 of which we have threshed, and which yielded fiftyone and a half bushels of first quality rye; three acres of winter wheat, which produced 911 sheaves, of which we have not threshed any.

These two crops were sown upon old pasture land, summer fallowed, and without manure. The nine hundred and eleven sheaves of wheat, or sixty shock and eleven sheaves, will yield by fair estimate three quarters of a bushel to the shock, which will amount to fortyfive and a half bushels. I have raised fourteen acres of oats on land on which I had beans last year. After putting a light sprinkling of manure of twenty loads, the fourteen acres produced 3080 sheaves, of which I have threshed 550 sheaves, which yielded fiftyfour bushels; very nearly one bushel to ten sheaves. I have also raised two acres of spring rye, which produced 601 sheaves; of this crop I have not threshed any, but it is a good one, and so good as to give me the B. A. Society's first premium. I had oats upon the land last year, but I put twenty loads of manure upon it. I sowed two acres of marrowfat peas upon land on which I had potatoes last year, but the crop failed almost entirely, and I got but twelve bushels. I have also raised one acre of buckwheat where I had beans; put six loads manure and sowed one bushel of seed, which produced seventeen bushels. I have also raised two acres of white beans, which is a very good crop, but which I have not been able to harvest. The time you have fixed on for making application, (1st October,) is a little too early for my convenience, and I shall not be able to make my statement complete in all respects. For instance, it would be considerable loss to me, I should think, to thresh out all my grain thus early, particularly oats, as the straw makes tolerable feed in winter; and it also furnishes employment for my man who takes care of the sheep and barn. Potatoes I have considered among the first and most valuable crops that the farmer raises; I have therefore made several experiments, and by far too many for my interest; yet my experience may be useful to others, and I have concluded to state some of my experiments, and offer some few remarks.

Some few years ago, believing that the quantity usually raised from an acre might be increased materially, I accordingly ploughed one acre of mellow land, dragged it, and furrowed it out at three feet a part, and filled the furrows with well-rotted manure. I then sorted out the largest and best potatoes, and planted them in the furrows on top of the manure, placing one potato every six or eight inches apart; then planted in the whole fortyfive bushels; they were well covered, and hoed three times, and at digging they were found to be almost all of them very small, not larger than walnuts, perhaps not as many good ones of good size as I planted. This I charged to the season as being unfavorable, and the subject passed off.

Two years since, I set out twentyfour cuttings of grapes in my garden, where the ground was rich, being well manured, by sticking the ground end into a small potato about the size of a hen's egg, and placing that in the ground three or four inches deep; these were not hoed; the grapes all died, and in the fall I pulled and dug the potatoes somewhat early in the season, for eating. The quantity and large size excited the curiosity and astonishment of us all. Last year I planted in the garden, by way of experiment, one of the smallest potatoes, one of middling size, and one of the largest, in separate hills; and then put two, and three, and four in hills, where the land was equal; the result was, that the single potatoes produced the largest and much the best, but not so many in number of small size. I have made several other experiments, and quite enough. Upon examining a potato, it will be found that each, whether large or small, has from six to ten eyes or sprouts; and if it be fair to calculate that each sprout will produce from six to ten potatoes, each potato will yield from thirtysix to sixty potatoes, which number is by far too great to be congregated in the circumference of a hill; the consequence is, a great proportion of them are small, and if more seed is planted, the greater the number of small ones and less of large. This year I planted about three acres, and upon one acre I put fortyfour loads of coarse manure from my sheep yards; the cart body somewhat heaped, say about thirty bushels to the load; spread it over the land and ploughed it in; then dragged, then furrowed at three feet apart one way only, and dropped the potatoes without sorting, the smallest as well as large, at about two and a half feet apart, and covered, and hoed them twice. I planted eighteen and a half bushels of seed. On the next seven eighths of an acre, by the side of the first, I put twentyfive loads of manure, ploughed and furrowed as before, and dropped my potatoes single at three feet apart, planted seventeen bushels of seed, and hoed twice. The third acre was ploughed and dragged and furrowed as before, and a shovel full of manure, at about three feet, put in each hill, in all twelve loads, and hoed them but once, the same sort of seed in all, which is called the Burr potato, of flesh color, and excellent for table use. The result is as follows: The first acre produced 425½ bushels; the second, seven eighths of an acre, produced 250½ bushels; and the third acre we have not completed the digging of, owing to the constant rains for the week past; but we have dug part of them, perhaps one fourth part, and in such a way and places as to ascertain with a good degree of certainty, that this acre will not produce over one hundred and sixty bushels.

I have also raised one acre of ruta baga, which now promises a large crop. They are not sufficiently grown to pull, therefore I cannot ascertain the quantity. The land was well fitted by putting 20 loads of manure upon it, before ploughing; then, by spreading five loads of leached ashes and one load of unleached. I have strong hopes of a very large crop, although I do not consider it a very valuable one. I have also raised four acres of corn upon land on which I had corn last year, fitting it by putting seventeen loads of manure to the acre, by dunging in the hill. The four acres, which I have measured accurately, as well as my potato lands, have produced four hundred and fifty bushels of ears.

I have ploughed and sowed five and a half acres of winter rye, or thereabouts, and two acres of winter wheat upon the land upon which I have raised potatoes. This I have fitted, and intend to sow this day.

In addition to the above, I have let out about nine acres of land to be sowed to oats, on shares or for one half, and for which I have received 1347 sheaves. I have also let out about four and a half acres, which have been planted to corn, in the same way, or for one half, and had it dunged in the hill. This is a fine crop, and not yet harvested; besides about one acre and a half more, for buckwheat and potatoes. The land on which I have raised my oats, I have seeded down to clover and grass seed principally.

The number of apple trees in my orchard is one hundred and fortynine, and I have several others scattered over the farm. Seven years since, I put in one thousand grafts by contract, principally of winter fruit, such as greenings, spitzenbergs, gilliflowers, russets, golden sweetings, and seek-nofurthers, &c, of which I have a great abundance this year; but owing to the incessant rains for a week past, I have not been able to gather them. I shall have, probably, between 100 and 200 bush-

els. I have cider apples, and a great supply for family use, enough probably to make forty or fifty barrels, which I do not usually make until some time in October, and have not yet done it. My manner of making cider is the common one.

As to sowing grass seed, I usually seed down about ten acres annually, with four quarts of clover and four quarts of herdsgrass to the acre, which I consider plenty for mowing land. I have made several experiments. After taking off a corn crop, I have ploughed and sowed nothing but grass seed; this was done in the month of October and it took well, but did not get to maturity fully the next season. I have also sowed with rye in the fall, and also upon snow covering wheat and rye, and also in the spring with spring wheat, rye and oats; and I am satisfied that to sow clover and herdsgrass in the spring with oats, is the best time and way.

My barn is one hundred feet long and forty feet wide, standing east and west, with a floor through it lengthwise, over which is another floor, each twelve feet wide. Upon the south side of my barn I have a tier of stables extending the whole length, twelve feet wide, which is sufficient to put up twentyfive head of cattle. I have one shed extending from the west end of my barn, south, one hundred and twenty feet, half of it twenty feet wide and the other half fourteen feet, capable of holding thirty or forty loads of hay overhead. I have three or four other temporary sheds of less value. My barn-yard is one hundred and twenty feet square, divided by a line of fence through the centre each way, making four yards of about sixty feet square, with a shed for each and a well of water in the centre, from which I water each. In each of these I have wintered about one hundred sheep, and make my manure principally by bedding them with straw. Of my sheep, I have now about the same number as last year, four hundred and thirty, having disposed of nearly as many as my increase by lambs. I sheared three hundred and fifty, which produced eight hundred and fiftyone pounds of first quality wool, sold for seventyfive cents per pound. I raised only eightyfour lambs, in consequence of a severe rain storm the first week in May, which is the time I usually have them yeaned. I lost a considerable number. I keep them in separate flocks, and feed them in winter out of boxes prepared so that they can put in their heads on either side, and not waste the hay. This business of growing wool was my principal object in farming; but the low price the wool has brought for three or four years past, has almost wholly discouraged me. I have been disposed to reduce my flock about one half, because I could not grow the wool for the price it has brought. This year, however, it has brought a fair compensation for growing. My sheep are first quality, merino and saxony, the fleeces light. I have kept only two yoke of oxen, three cows, and three horses. From my cows, which are of the first quality, we have made butter only enough for family use. Of swine, I only keep and fat enough for family use, and some little surplus to pay laborers. I am now feeding six of the Byfield breed, which I intend to make weigh from 300 to 400 pounds each. I have one that will now weigh more than four hundred. I make my pork by boiling potatoes the fore part of the season, then pumpkins, provender and corn.

In addition to my crops, I shall have probably 30 bushels of English turnips. I have a large garden in which I put out one thousand cabbage plants; have raised six and a half bushels of onions, a great supply of beets, parsnips, carrots, winter squashes; besides water-melons, musk-melons, cucumbers, &c. I have ten peach trees, ten pear trees, and about one hundred filbert bushes, which have all borne finely, except peaches, with which I cannot succeed here at all. As to amount of labor, I have had but one hired man for six months, to whom I paid ten dollars per months, or sixty dollars. I have two boys, almost men, belonging to my family, besides my own labor. I have paid for day laborers, according to my account, sixtythree dollars and fifty cents only. You will notice the amount of labor performed with little help and little expense, but I have yet considerable more to do; I have yet to cut, I think, more than ten loads of rowen hay, and intend to sow a number of acres of late rye. Having made no cider the last year, I made trial of molasses and water, but all would not do, I was obliged to furnish a little ardent to my day laborers to get through haying and harvesting; the precise quantity I do not know, but I think it would not amount to more than twelve or fifteen dollars. To recapitulate,—

58 acres of mead. mowed & produced		129	loads hay.
20 do. of rye	produced	4568	sheaves.
3 do. winter wheat	do.	911	do.
14 do. oats	do.	3080	do.
2 do. spring rye	do.	601	do.
2 do. marrowfat peas	do.	12	bushels.
1 do. buck wheat	do.	17	do.
2 do. white beans			
3 do. potatoes	do.	836	do.
4 do. corn	do.	450	do.
5 do. ruta baga	do.	500	by estimate.

15 acres let out on shares, the produce of which not yet ascertained, except 1347 sheaves of oats. The residue of my farm is wood and pasturage.

In this statement, I believe I have not overstated or over-rated any item; and I am inclined to think that my corn, which we completed last evening, if accurately measured by stricken measure, would hold over something like a half of a peck to the basket, which we heaped.

I am, dear Sir, very respectfully, your obedient humble servant, JONATHAN ALLEN.

Berkshire, ss., Pittsfield, Sept. 29, 1831.—Then the above named Jonathan Allen personally appeared, and made oath that the foregoing statement by him subscribed, is, according to his best belief and judgment, true.

JOSHUA DANFORTH, *Justice of the Peace.*

FOR THE NEW ENGLAND FARMER.

The following, from an experienced cultivator in the State of Maine, we have been permitted to copy from a communication sent to Hon. JOHN WELLES, of Boston.

AGRICULTURAL MEMORANDA.

I have proved the value of parsnips as a substitute for my usual green food. The experiment was made on a cow, exhibited as a *fat cow*, about eight years since, at Brighton. It was not long before she was turned into pasture. On carrots and turnips she gave twelve pounds of butter per week. While fed on turnips she gave 13½ lbs. per week. They were better than Indian meal.

You recollect two heifers I sent to the Denton bull. I have one now left, and from the produce of her second calf, which was killed at four years old and weighed nine hundred pounds, I have a cow with her third calf. The cow gives *two* pails full of milk per day, of which the calf takes a little more than half, and is very large and well shaped.

The cow exhibited at Brighton met with an accident, and at five and a half months lost her calf, and was afterwards unfit for breeding. In the five and a half months she gave,

Of butter,	202½ lbs.
Of cheese,	38 lbs.
Milk for the calf,	482 quarts.

In the first fifty days she gave *fifty pounds of butter*, and on an average rather more than nine quarts per day of milk to the calf.

From the same heifer, which I sent to Northborough, a calf was raised last year by Mr Howard, which at seven weeks old he sold for twentyfive dollars. An accident happened to it at five months, and when dressed it weighed three hundred and seventyfive pounds.

FOR THE NEW ENGLAND FARMER.

NEGLECTED CATERPILLARS.

MR EDITOR—I had occasion last week to visit Lowell, and as I rode past the farms on my way, I was astonished to see fruit trees and especially the apple, so much neglected. The pruning knife and its use, I should judge, was not known to the proprietors of these farms; and the caterpillar in the thick tops of the trees, finds a secure and unmolested retreat; so abundant were their nests, that in many cases the branches appeared white with them. It would certainly be more creditable to the managers of these farms, to cut down, at once, these monuments of their neglect, than to remain the subject of remark to all those who pass, and as so many proofs of their want of interest in horticulture. G. L.

Boston, June 9, 1832.

FOR THE NEW ENGLAND FARMER.

MASSACHUSETTS HORTICULTURAL SOCIETY.

On Saturday, 23d inst., Messrs Winships, of Brighton, exhibited a collection of herbaceous plants; amongst them, a very fine specimen of Delphinium sinensis, and Scotch and other Roses.

By Mr David Haggerston, of Charlestown, a fine collection of Ranunculusses and Anemones, for premium; also, by the same, yellow, pink, tea, and Moss Roses.

By J. Prince, Esq., Liriodendron tulipifera, or Tulip Tree.

By Mr Phipps, of Charlestown, Moss Roses and other flowers.

From Young's Farmer's Calendar.

BURN DRY WEEDS FOR MANURE.

Our young farmers may perhaps want to be reminded, that spreading any sort of dry vegetable substance on the land and setting fire to it, previous to harrowing in or drilling turnip seed, is one of the most powerful manures that can be used. There are situations where fern from wastes, warrens, &c, may be collected in almost any quantity; if he has it in his power to preserve more than he wants for littering, he should save it carefully for this use. In the fens of Cambridge and Lincoln,

[England,] it has long been a custom to burn oat and other stubbles of reaped crops, and the effect resulting from it was probably the origin of a practice which I first heard of in the latter country, that of burning straw for this purpose.

It subsists on the wolds. At Lord Yarborough's I first heard of this custom. His Lordship's tenant, Mr Richardson, a very good and intelligent farmer, gave me the account, having long practised it with success. The quantity is about five tons to an acre. At Great Lumber, he straw-burnt a piece in the middle of a field preparing for turnips, and on each side of it manured with ten loads of yard dung to an acre, and the burnt part was visibly superior in the crop. In another piece the same comparative trial was made in 1796, for turnips, which crop was much the best on the burnt part; and in 1797, the barley equally superior. On another farm he had at Wold Newton, he did it for turnips, then barley, and laid with sainfoin; and the burnt straw was better in all those crops than yard dung. Burning gorse in this manner returns great crops, but the expense is too high. He is clearly of opinion, that it is the warmth from the fire that has the effect, and not the ashes; for the quantity is nothing, and would blow away at one blast. It is proper to observe, that they do not value straw used in feeding cattle, at more than four or five shillings per ton.

Mr Mallis, of Lumber, is of the same opinion, and thinks four tons enough; he never knew that quantity fail for turnips.

This straw-burning husbandry I found again at Belesby. Mr Lloyd, who, as I should observe, is an excellent farmer, thinks that it takes six tons per acre, which will last longer in its effect and beat the dung which that straw would make, and in general lasts longer than common dunging. Keeping much cattle, he cannot practice it, but highly approves it.

In discourse at Horncastle Ordinary, on burning straw, the practice was much reprobated; yet an instance was produced that seemed to make in favor of it. Mr Elmhurst, of Hazlethorpe, burnt twelve acres of *cole-seed* straw on eight acres of the twelve, and the effect was very great, and seen even for twenty years; he sowed wheat on it, four bushels to an acre, and had five quarters; the four acres upon which nothing was burnt, was much the better land, yet the crops on the burnt part were by that made equal to the rest. But in another similar experiment for turnips, Mr Rancliff observed the result, and the effect, though good, lasted only for one crop. Mr Kirkham, who was in company, gave it as his opinion, that as cattle would not eat stubble, it might be beneficial to collect and stack that and before turnip sowing burn it.

The Rev. Mr Allington, of Swinop, has cut and carried gorse, and spread it on other land, and burnt it in May for a manuring for turnips; but has done it twice and it answered very well; but of course it is to be noted, that this is done only when it cannot be sold for faggots, which sell at eight shillings per hundred; so that the expense would be £4 an acre, as one thousand are produced per acre, and he burnt the produce of one acre upon another; the effect was great in the turnips; the barley was better for it; but he has not attended to it in the seeds, because hard stocked with sheep. He has burnt on the land for turnips, the long straw dung from the surface of the farm-yard, and he had better turnips there than where the dung was laid. This has been the case in two experiments he has made.

A general practice through the mountains of Gascony, and almost to Bayonne, is that of manuring for *raves*, a sort of turnip, with the ashes of burnt straw. I observed several fields quite black, and demanding what it was, my guide told me of this common practice here; afterwards I saw them strewing straw quickly over land, part of which had been already burnt on. They do this on a wheat stubble, but not thinking that stubble enough is left, they add much wheat straw, and setting fire to it, burn the weeds as well as the straw, and clean as well as manure the land.—With such quantities of fern on all their extensive wastes, I asked why they did not burn that and keep their straw? The reply was, that fern makes much better dung than straw, so they burn the straw in preference. As soon as the operation is over, they plough the land and harrow in rave seed. One large field, thus treated, I saw ploughing for that crop. They both hoe and hand-weed the raves, and have them sometimes very large, many as big as a man's head; use them for oxen.

HOGS FATTENED ON SWEET APPLES.

It appears by an article published in the New York Farmer, that Mr William Canfield, of Schodach, Rensselaer County, N. Y., owns an orchard wholly grafted with sweet apples, in which he has kept hogs most of the season, where the grass and a little whey were sufficient to promote their growth. About the time when hogs always manifest a disrelish for grass, the wormeaten apples began to fall, sufficiently matured to become eatable. As they advanced in size and ripeness they became more and more agreeable, and more nutritious, until the hogs began to fatten rapidly on no other food. The trees were therefore shaken or beaten with light poles, so as to throw down a due quantity of the most ripened fruit. This process was continued until the whole herd was become sufficiently fattened. Then Indian corn was given in about half the common quantity for about one week, and full feeding of it another week. This brought them to the butchering, and the pork was not inferior to that which is fattened in a more expensive manner. One full grown tree or two inferior ones was found sufficient for a hog, weighing two hundred and fifty pounds.

A writer, whose communication was published in the New England Farmer, volume v. page 82, states as follows:—

"I have tested by ten years' experience, the value of apples as food for animals. I keep five or six hogs in my orchard upon nothing but apples and a little swill; and have uniformly found them to grow and gain flesh faster than hogs fed upon anything else, except grain. On the first of November they are very decent pork, after which I feed them about six weeks on grain before I kill them; and I believe I have as fat hogs and as good pork as my neighbors, who give to their hogs double the quantity of grain that I do to mine."

Not only are apples of use in feeding hogs, but hogs are useful in preserving apples from the curculio or the worm, that injures and destroys a very large portion of our fruit. When swine are permitted to go at large in orchards, they devour the fruit as it falls, together with the curculios in the maggot or larva state, which may be contained in such fruit. Fruit, however, may be gathered as fast as it falls and given to hogs confined in a stye, or not permitted to run in an orchard. But in order to insure the destruction of the insects as well as to prepare the fruit for the swine, so that it may yield its greatest quantity of nutriment, it should be boiled; and a little bran or Indian meal, or other farinaceous substance added to the fruit while boiling, will make a compound which will greatly promote the growth and fattening of these animals. Sweet apples contain more nourishment, but all apples and every kind of fruit are useful when thus prepared and applied. If no wormy fruit was ever suffered to lie on the ground long enough for the worms to escape into the ground, we should soon extirpate this pernicious insect.

HORTICULTURAL JOURNAL,

Kept at the garden of the proprietor of the New England Farmer, in Lancaster, Mass., thirtyfive miles west from Boston, on the river Nashaway.

June 12.—Warm; mild shower at night; planted Early Frame Cucumbers, Early Scollop Squash, and Sweet Corn; Clarkea pulchella, Pæonia officinalis and P. albicans in bloom.

13th.—Rainy morning, cloudy day.

14th.—Very warm day; planted Squashes, Melons, Beets, and Carrots.

15th.—Very warm; Phlox maculata and P. suaveolens in bloom, (beautiful perennials 2½ feet high)—also Yellow Day Lily (Hemerocallis flava), African Poppy, Blue Sophora, Scotch Roses, Perennial Lupins.

16th.—Very warm; Anchusa paniculata (a fine perennial) Snow Ball, Rose Acacia, and Campanula speculum in flower.

17th.—Very hot and windy; Oriental Poppy, (a very splendid perennial) in bloom; also Snapdragon and Foxglove.

18th—Fair, with few flying clouds; thermometer at noon 62°; Potentilla atrosanguinea (an elegant perennial) in bloom; flower seeds from Tuscany and China, presented to the Massachusetts Horticultural Society, by Hon. T. H. Perkins and Mr Ombrosi, vegetated finely.

19th.—Thermometer at noon 67.

20th.—Thermometer 79; Valerian rubro (a handsome perennial) in bloom; Asparagus sowed May 3, just begins to make its appearance. Rose bugs first noticed; several varieties of flower seeds from the West Indies, presented by Miss Dix, of Boston, mostly gathered by her in St Croix, have grown finely; among the collection are several splendid varieties of Convolvulus, which have vegetated well, and give promise of ripening their seed.

21st.—Thermometer 82 at noon; Campanula persicafolia, (a handsome perennial) in bloom; the common Squash and Yellow Striped Bugs first noticed; White Mulberry Seed, sowed May 12, just coming up.

22d.—Thermometer 82; Spiræa filipendula, and Delphinium sinensis, (beautiful perennials) in bloom; also common Larkspur, and the Oriental Poppy, the latter one of the most showy perennials cultivated.

Among the present ornaments of the Flower Garden, the Beautiful Clarkea (Clarkea pulchella), of which a drawing is subjoined, deserves particular notice. It was

first introduced into England in 1827, from Columbia river, and received its geneire name in honor of Capt. Clark, the companion of Capt. Lewis in his journey up the Missouri. As a neat, showy annual, it has few superiors, and is well calculated for being grown in beds or masses, or as single plants in borders. That it may flower in perfection it should be sown in September where it is to remain, or it can be transplanted early in the spring, being as perfectly hardy as the Coreopsis tinctoria. When thus managed it continues in flower nearly all the summer; and although it may have disappointed the expectation of some who have sowed it in pots, or given it an imperfect trial, or expected a gorgeous show, it will be admitted by all who have seen it in perfection, that it will vie with the Coreopsis tinctoria as one of the most popular and prettiest ornaments of the garden.

Rural Economy.

OBSERVATIONS ON THE CULTIVATION OF SILK.—No. 1.

Mr J. D. Homergue, in his letter to the Hon. Andrew Stevenson, Speaker of the House of Representatives in Congress, says: "In one acre of land there are 43,560 square feet, on which may be planted 3000 mulberry trees, (from 4 to 3⅔ feet apart.) These will yield, at the age of seven years, 90,000 pounds of leaves; 30 pounds to a tree; producing 7,500 pounds of cocoons. At 25 cents per pound, these cocoons will sell for $1,875; at 40 cents, $3000; at 50 cents, $3,750."

In Fessenden's New American Gardener, page 272, it is said, "one ounce of seed will produce about 40,000 worms, who consume about 1000 lbs. of leaves and produce from 80 to 100 pounds of cocoons; and 12 pounds of cocoons give about 1 pound of silk." In the Franklin Journal, volume 2, pages 22, 94, and 139, Count Dondola says, "The quantity of leaves actually consumed by 200,000 worms, is, in the first age, 20 pounds; second, 55 pounds; third, 215 pounds; fourth, 620 pounds; fifth, 3,820 pounds; making in all, 4,731 pounds of leaves—and that where trees are convenient, two persons will attend and feed 240,000 worms, until ten days from spinning, when five or six active children are necessary." It is also known, that four or five weeks, where the worms are well fed, completes the time of feeding. The Massachusetts Journal, of 1828, volume 10, No. 2, page 137, says, "A single acre planted with the mulberry, will produce from five to six hundred pounds of raw silk," but the number of trees is not mentioned.

According to the above calculations, 240,000 worms will consume 6000 pounds of leaves, requiring the time and attention of two women for five weeks, which, at $3 per week each, including board, is $30; and six children, ten days each, at $2 per week, is $17; making the cost $47 for 6000 pounds of leaves. At that rate, 90,000 pounds of leaves, the produce of one acre, would feed 3,600,000 worms, and the cost for feeding them, $705, which, being deducted from $1,875, the price of the produce, leaves $1,170 for the annual income of one acre of trees. Thus, by the above calculations, differing but little in the amount, it is seen that the income afforded by one acre, after seven years, must be immense. This acre, it is to be presumed, must be of the best quality and the trees highly cultivated, to produce so much. Mulberry trees will grow on poor land, but the produce will be comparatively small. But supposing Mr Homergue's calculations to be made from the best kind of land, and that we have much poor rocky land; let us call the product of leaves only one ninth as much as is estimated above, we have only three pounds of leaves from each tree, and lest it may require more help to feed the worms, we will say four women and twelve children; which will reduce the cocoons to 750 pounds and the sales to $187 50, and the cost of feeding will be $141, and there will then remain $46 50 for the annual income of one acre.

All the uncertainty in these calculations, arises from the quantity of leaves produced on an acre, and that must vary according to the quality and cultivation of the soil; all the rest can be ascertained from actual experiment. But I understand it is the practice of some to let their trees on shares: one fourth of the cocoons to those who gather the leaves, one half to those who tend and feed the worms, and the other fourth to the owner of the trees, which, if the trees produced 90,000 pounds of leaves, and the cocoons sold for $1,875, would be for one half $937 50, and one fourth, $468 75. But supposing the trees to produce one tenth only of this quantity, then one half would be $93 75, and one fourth, $56 87½. This amounts to about the same thing as calling the labor of gathering the leaves and feeding the worms, double what it is calculated in the Franklin Journal, at the price of wages and board which I have calculated.

Now taking the smallest estimate of income, and in what way can a farmer, remote from a sea-port town, acquire so much with so little capital and labor, in about five weeks' time? If any person will point out any way, and prove it to the satisfaction of the Legislature or Agricultural Society, I think he would merit a great reward. But this business may be particularly recommended to "Overseers of the Poor" in every town, who have a farm—and every town ought to have one—to keep their paupers; for if one half their paupers are able to gather leaves and feed worms five weeks, this business would support all of them a year, exclusive of the cost of an overseer. Permit me to suggest one consideration more—if all the highways in country towns were ornamented with a row of mulberry trees, on each side, half a a rod apart, each mile would contain 1380 trees, the income of which, after seven years, would probably pay for repairing all the highways and the expenses of the public schools, if the inhabitants would restrain their cattle and sheep from going at large. There is another method of producing silk from mulberry trees, one year after transplanting them; which is, to plant them in rows, three feet by two apart, which would give about 7000 to an acre; and everyother year, with a sharp instrument, to cut them off within three or four inches of the ground, and feed them out or cut them off every year. But whether this method will produce as much or more silk, than to omit picking the leaves for seven years, I have not obtained information sufficient to decide.

If any gentleman will point out the errors of the above calculations and furnish to the public more correct ones, he will much oblige a well wisher to agriculture and domestic industry.

To be concluded next week.

DAIRY.

The following extracts from celebrated English writers may be useful, although they relate to very common processes, and which ought of course to be well understood.

"I take it that oftentimes in very hot weather, the milk in a cow's udder, much agitated by driving or running about, is in a state not very far different from that carried on in a churn, which frequently makes the great difficulty in what is called bringing the cheese, or fixing the curd in the tub or pan; I have often heard dairy-women say, that it is sometimes very difficult to make it come at all, and instead of one hour, (the time very commonly given by dairy-women, in bringing cheese,) that it will frequently not come in three, four, or five hours, and then in such an imperfect state, as to be scarce capable of being confined either in the cheese-vat or press; and when released from the press, will heave or puff up, by splitting or jointing, according as the nature or state of the curd happens to be. Whenever people find their cows in this situation, which in hot summer evenings must often happen, especially where water is scarce, or in grounds where there is very little shade; then it is, that making use of a little cold spring water, before earning or rendling, is useful, as that will make the runnet take effect and the milk coagulate much sooner. It often happens, in some dairies, that the work is quite at a stand; the dairy-women not knowing how to hasten the coagulum, or coming of the cheese, thinks of putting more runnet in to forward it; but the nature of runnet being such as will dissolve the curd in part coagulated, if more be put in, disturbs the whole and prevents its becoming curd at all, or in a very imperfect state, remaining in the whey in an undigested state that will neither turn to curd or cream, and a principal part of the richest of the milk is then cast away with the whey. Cold water, with a little salt, as hereafter recommended, will in a great measure prevent this difficulty. One great point or thing to be observed, in first setting off or rendling the milk, is carefully to observe the state of the milk as to heat or cold; the grand medium or state it should be in when you put the runnet into it, is what may be properly understood milk-warm; if you find it to be warmer than that, it is recommended to put some fresh spring water into it, in such quantity as will reduce it to a milk-warm state; a quart, two, three, four, or more, according to the quantity of milk to be so cooled; many people may think water will hurt the milk or impoverish the cheese, experience shows it will not, but is a means of the runnet more immediately striking or operating with the milk. I would recommend the use of a thermometer, to show the degree of heat milk bears. I doubt not, one may be constructed on a very easy plan that will cost a very little money, and it will be well worth while to be at a small charge to regulate a fault, of putting milk together too hot, which is of more ill consequence than people are aware of.

"Sometimes, if cheese be laid cool when first made, or coming from the press is dried outwardly by means of a harsh cool air, when at the same time the inside of the cheese remains in a moist state; though the coat is hard and dry, when that cheese is exposed to heat, either by lying near a hot wall, or near tiles in hot weather, or by the immediate heat of the sun, it will be drawn up round, in the same manner and by the same cause that a board is made round or coffered up by the heat of the sun. Rank cheese very often heaves, from the cause before given, that makes it rank. Cheese is very apt to split or divide in the middle by being salted within, especially when people spread salt across the middle of the cheese when the vat is about half filled, which curd, though in a small degree separated by salt, never closes or joins, and is much easier coffered up or drawn round than other cheese; especially thin cheese made in what we call Gloucester vats, being round or rising in the bottom, and the slider or cheese-board that is laid over it, made convex also, in order to make the cheese thinnest in the middle, that it may dry quick for early sale. Then, if salted within, and being laid soft on the shelf to dry, as it bears only on the edge all around, it is almost sure to split, and it is often seen; scarce a cheese in some dairies, of this form, but what do split. Salting a little in the milk is greatly preferable, for these dairies in particular."—*Twamley.*

"It is a fact well established, that the season has great influence on the quality of cheese, es-

pecially on the defect more immediately under notice. In 1783, a dry hot summer, scarcely any dairy could make good cheese. In some dairies more than half the make was hollow; and even in the best dairy I had an opportunity of examining, numbers were "eyey," while in a common season, and more especially in a cool summer, the same dairy has scarcely a defective cheese.

"In North Wiltshire, an experienced and very intelligent dairy-woman observed, that when the "crazy" (the crow-foot) is in full blow, she finds her cheese particularly inclined to heave; while a dairy farmer of the highest class in the same district, has observed, that when the creeping trefoil white clover *(trefolium repens)* has been in full blow, and in particular abundance, he has heard the loudest complaints of the licentious disposition of the cheese. It is not probable that any one species of plants is the sole cause of the disorder. Almost every cheese has its peculiar flavor and its different degree of acrimony. Nothing is more likely to give that almost caustic quality which some cheeses are possessed of, than the common and bulbous crow-foots; not only their flowers, but their leaves, are singularly acrid. On the other hand, their are several circumstances which render it probable, that a redundancy of the creeping trefoil tends to aggravate the disorder. Dry seasons, by keeping the grass short, give it an opportunity of spreading. Manure is well known to encourage it, sometimes in a singular manner.—Sheep-feeding pasture grounds produce a similar effect; partly owing, perhaps, to the blade grasses being kept short, and in part to the soil being meliorated by a fresh manure; and it has been observed, that a suit of cow-grounds, which have been occasionally fed hard with sheep, are very difficult to make cheese from; while a few sheep among cows may, by picking out the clover, be serviceable to the dairy."—*Marshall.*

MADDER.

(Rubia Tinctorium.)—The following directions for raising this plant are copied from "the Emporium of Arts."

This plant may be propagated either by offsets or seeds. If the latter method is preferred, the seed should be of the true Turkish kind, which is called *lizari*, in the Levant. On a light thin soil, the culture cannot be carried on to any great profit. The soil in which the plant delights is a rich sandy loam, being three feet in depth, or more.

The ground, being first made smooth, is divided into beds four feet wide, with alternate alleys half as wide again as the beds. The reason of this extraordinary breadth of the alleys will appear presently. In each alley is to be a shallow channel for the convenience of irrigating the whole field, &c. That part of the alley which is not occupied may be sown with legumes.

The madder seed is sown broadcast, in the proportion of from twentyfive to thirty pounds per acre, about the end of April. In a fortnight or three weeks the young plants begin to appear; and from this time to the month of September, care must be taken to keep the ground well watered and free from weeds.

If the plants are examined in autumn, they will be found surrounded with small yellow offsets, at the depth of two inches; and early in September, the earth from the alleys is to be dug out and laid over the plants of madder, to the height of two or three *feet.** With this the first year's operation ceases.

The second year's work begins in May, with giving the beds a thorough weeding; and care must be taken to supply them with plenty of water during the summer. In September the first crop of seed will be ripe; at which time the stems of the plants may be mown down, and the roots covered a few inches with earth taken, as before, out of the alleys.

The weeding should take place as early as possible in the spring of the third year; and the crop, instead of being left for seed, may be cut three times during summer, for green fodder; all kinds of cattle being remarkably fond of it.

In October the roots are taken up, the offsets carefully separated, and immediately used to form a new plantation; and the roots, after being dried, are sold, either without further preparation or ground to a coarse powder, and sprinkled with an alkaline lye.

The roots lose four fifths of their weight in drying; and the produce of an acre is about two thousand pounds weight of dry saleable madder.

Madder usually sells for about thirtytwo dollars per hundred; so that the produce of an acre, as above stated, would amount to six hundred and forty dollars.

* *Inches*, we suspect it should be, instead of feet.

TO BOIL POTATOES.

Being almost half sick from the changeable weather, I the other day retreated to the kitchen corner, a comfortable place when the cook is good natured. She was a new comer, a native of Wales. The potatoes were peeled, and put into the water after it had commenced boiling. After they were about sufficiently boiled the water was poured off, and the sauce pan containing them again put on the coals to drive off the moisture. Two or three times in the course of ten minutes, she took off the lid and shook up the potatoes, bringing those at the bottom to the top. In this last operation consists the whole art of boiling a potato. The steam is allowed to escape from all the potatoes and from all parts of the sauce-pan. If a towel is put over the potatoes while they are steaming, it absorbs the moisture that condenses on the under side of the lid and drops again on the potatoes. When the lid is taken off to shake up the potatoes, the towel is also taken out. Potatoes managed in this manner, are superior beyond all comparison, to those cooked in the common way.—*N. Y. Far.*

ILLINOIS BUTTER.

The editor of the Illinois Advocate complains bitterly of the quality of the butter brought to Edwardsville, Illinois. Even high prices, it appears, have no effect in producing it of good quality. The cause is rather a curious one, and we will let him speak for himself. "If *high prices* would be of any effect *here*, cause of complaint would have long since been removed. But the cause is innate in the makers, and in consequence, good butter is as rare in this market as pine-apples in Iceland.—*Ecce signum.* A few days since, we purchased a few pounds (Hobson's choice,) and although the morning was cool and the butter had been up in nice rolls, we were obliged to lift it out of the vessel in which it had been brought, by *spoonfuls.* What a pity that hogs are so much easier raised in this country than cows; and that, in consequence, *lard* is so cheap as to make it profitable to mix it in butter in the proportion of at least *one half.* Greasy doings these."

CULTURE.

Soap suds is one of the best antidotes against insects, as well as a very good manure. Trees, shrubs, garden vegetables, &c, if showered with this liquid once or twice a week, would not be injured by worms and bugs, and would flourish surprisingly. Watering plants, such as potatoes, turnips and even flax, with sea-water, has been recommended with Dr Deane; but he says, "salt water applied to tender plants, most commonly proves too strong for them, if applied when the ground is dry; but if it be wet, the strength of the water is abated by mixing with the juices in the soil, before it is taken up by the roots, and thus it is rendered innocent and safe, as I have found by experience." Do not forget to place a handful of ashes or plaster, or mixture of both, on your hills of corn and potatoes, just before the first or second hoeing. These substances are usually applied after hoeing, but it has been thought better to cover them with earth, lest the sun and air steal away their fertilizing qualities. Soap suds is the best of manures for cucumbers, melons, &c.

BEES.

Watch your bees, for it is about time to look out for swarms. This useful insect meets with less attention from us farmers, than it merits. Bees cost almost nothing at all but a little care, and a few hives which almost any farmer can make. Some believe, and apparently on good grounds, that a garret or anyother unoccupied dark room will answer every purpose of a bee-house; and Dr Smith asserts, that bees in a garret, "with so much room before them and a few small orifices through which they might get into the open air, never would swarm till the whole garret was completely stored with comb." But in order that you may manage your bees to the best advantage, you had better procure the little treatise on bees, written by Dr Thacher and Dr Smith,* which may be had of any of the Boston booksellers, as well as at the New England Farmor office.

Yellow Locust Tree.—A writer in the New York Farmer, recommends this tree as one of the most valuable for various purposes, that we have in the country. The wood is tough, elastic, grows rapidly, and outlasts almost or quite all other kinds of wood. A fence post five inches in diameter, he says, will remain sound for fifty years. For sills of houses and other timber exposed to dampness, he says it will last longer than any other wood. It is highly valued in ship-building.

Specific for Cholera.—"The following simple recipe," says a Calcutta paper received by the last arrival, taken at a single draught, "seldom fails of affording instant relief to the patient, viz. one ounce cinnamon water, thirtyfive drops tincture of opium, one drachm spirits of lavender, and two drachms tincture of rhubarb."

Antidote to the Cholera.—The Board of Health of Quebec recommend to every citizen to provide himself with a phial of laudanum and one of peppermint, to be carried about the person, and resorted to immediately upon the attack of the malady.—*New York American.*

NEW ENGLAND FARMER.

Boston, Wednesday Evening, June 27, 1832.

FOR THE NEW ENGLAND FARMER.

LIME, GYPSUM, &c, AS MANURES.

Mr Editor — I have no desire to disturb Professor Eaton in his school-room, nor in his laboratory; but when he leaves these and sets up as a teacher of practical agriculture, his opinions are fair subjects of criticism. If they are crude or inconsistent, he should be permitted to explain the one and reconcile the other. If erroneous, they should be exposed; for error becomes prejudicial in proportion to the elevation of the source from which it emanates. A Professor of the Sciences and a teacher youth, ought, above all others, to be circumspect in the assumptions he makes on practical subjects.

You published in a late paper, a letter from Professor Eaton to Mr C. Minor, some extracts from which follow, and which I beg you to republish with the accompanying remarks.

"Pulverized limestone (carbonate of lime) will supersede," says the Professor, "all manures, when it is well understood."

Again. "Four times the quantity of ground limestone is required, to equal quick lime the third year, but it will continue its effects unabated ten times as long. Quick lime loses its effects in about ten years; carbonate of lime improves the first ten years and diminishes but little the next ten years, and its effects may be perceived fifty years."

Here we are treated with an entire new theory as to the food of plants, without a reason being assigned, or a single experimental demonstration given; and this too by a philosopher and a teacher! and a man withal, who, according to his own declaration, has for twelve years had the care of a million and a half acres of land!!

I had considered it a pretty well settled opinion, that carbonate of lime (powdered limestone) produced no other than a mechanical effect upon the soil; i. e. that it rendered clays more porous, and sands more compact and retentive of moisture, and in this way was beneficial to most soils in the same way that sand and clay are, as mere earths, and in no other. And although it has been experimentally tried, I have never heard of its being applied in quantity, and seriously doubt if a single load has ever been applied under the Professor's eye, or even in the State of New York, as a fertilizer to soils.

As the extract I have made affords no clue, I was extremely at a loss to understand the *modus operandi* of this all-quickening principle, which is destined to supersede animal and vegetable manures, until I read the following.

"Farmers," continues the Professor, "will never reason correctly until they submit to the established maxim, [established *how* and *by whom?*] that their cultivated vegetables *receive their chief nutritious matter from the atmosphere.*"

The only way to perceive the Professor's consistency, is to suppose that he designs, by some occult process to convert this carbonate of lime into atmospheric air, that all plants may then feed themselves and to the full, without the aid of man, with this true pabulum of vegetable life and developement. What a discovery this to the proprietors of sandy barrens, who spend their time and money in transporting to their farms the prutrescent manures of your city.

But I have not done with the wonders of this wonderful man. "Plaster of Paris," says he, "stimulates vegetable action, as a glass of brandy stimulates a hardy laborer to eat an unusual quantity, but it affords no nutritious matter." Now I beg leave respectfully to inform the Professor of a fact, which I presume has not come to his knowledge, viz., that many entire plants, such as in New England are denominated *English* grains and *English* grasses, belong to the *temperate cause* and absolutely resist the intoxicating influence of this vegetable stimulant; or in other words, that it neither causes them to eat more nor to grow more; and that all the families of plants which inhale the saline breezes of the ocean, have declared a total abstinence from all gypsum stimuli.

As my sheet is not full, I send you one other specimen of agricultural quackery, recorded in the same paper which contains Professor Eaton's learned letter. It follows: —

"But neither unleached ashes, nor lime in caustic state, should *in any case* come in contact with the seed corn or young plant." I can only regret that the admonition came too late to enable me to profit by it, as I had limed my corn as I do my wheat, before planting; and have often strewed lime on my wheat crop to destroy the fly, and unleached ashes on my corn to kill grubs, and to impart fertility. Indeed, Mr Editor, it is the first time that I learnt that lime and ashes were destructive, in the ordinary topical application, to the vitality of plants. B.

Memorandum. — May 22. Sent my man with one of Pickering's caterpillar brushes, affixed to a pole, at 8, A. M., into the orchard. At 11 he returned, having destroyed, according to his account, more than two hundred nests of caterpillars. — June 1. Finding he had not done his work thoroughly, sent him out again two hours. — June 14. Have not seen a worm on the trees since the last operation. Pomologist.

Remarks by the Editor. — We are sorry not to be able to agree with our respected correspondent, in some of his theories, opinions, &c. But as the points on which we differ are among those most controverted, and may be called the *metaphysics of agriculture*, it will not be at all wonderful if we do not always exactly coincide. The theory of the action of lime on soils is as unsettled as that of magnetic attraction, or the causes and sources of caloric; but its discussion can do no harm and may be beneficial.

Mr B. says, "I had considered it a pretty well settled opinion, that carbonate of lime (pounded limestone,) produced no other than a mechanical effect upon the soil; i. e. that it rendered clays more porous, and sands more compact and retentive of moisture, and in this way was beneficial to most soils in the same way that sand and clay are, as mere earths, and in no other." This is a well expressed condensation of Sir Humphrey Davy's doctrine; but other philosophers have held tenets a little variant from those of that great chemist. It is now contended, that lime when mild contains an excess of carbonic acid. It is capable of absorbing not only that quantity which it possessed in its natural state, (being about fortyfive parts in one hundred,) but an additional quantity, forming what chemists call an *hypercarbonate*. This is said to be highly soluble in water, which accounts for the admission of lime into the structure of plants; and that excess of carbonic acid adheres very loosely to its base (the mild lime,) and is liberated without any extraordinary degree of heat. The carbonic acid, a most important article of vegetable food, is copiously evolved in the prutrefactive process of manures; the calcarious earth fixes and prevents its escape, forms with it a hypercarbonate, and readily imparts it in union with water, towards the nourishment of crops. It is supposed to do more; it unites with the carbonic acid floating in the air; and when there is a scarcity of aliment in the soil, it seizes and secures this *food in the atmosphere, and afterwards* disperses it according to the calls and necessities of vegetation. Hence the necessity of keeping lime on the surface. It is then ready to intercept and combine with the carbonic acid, which is generated by the fermentation of the putrescent matter lying at lower depths, *and to attract the same gas* (the carbonic acid) *from the surrounding air.**

There are three forms in which lime is generally used in agriculture. 1. Carbonate of lime. This is the most common state in which it is found on the surface of the earth, in quarries of marble, &c, and it is then combined with almost half its weight of carbonic acid or fixed air. 2. Quick lime, or caustic alkali. When limestone is strongly heated, the carbonic acid gas is expelled, and then nothing remains but the pure alkaline earth; in this case there is a loss of weight, and if the fire has been very high, it approaches to one half the weight of the stone; but in common cases, limestones, if well dried before burning, do not lose much more than from thirtyfive to forty per cent, or from seven to eight parts out of twenty. 3. Slacked lime. This is merely a combination of lime with about one third part of its weight in water; i. e. 55 parts of lime absorb 17 parts of water; and in this case it is composed of a definite proportion of water, and is called by chemists *hydrate of lime;* and when hydrate of lime becomes carbonate of lime by long exposure to air, the water is expelled and the carbonic acid gas takes its place.† We will briefly advert to the peculiar uses of lime in each of these states.

Carbonate of lime is the only state in which lime can become a part of the substance of plants. As well might an animal swallow red hot cinders as plants be nourished by lime, except when it is a carbonate, i. e. mild or effete. When lime is quick, or caustic, or water slacked, or air slacked, it consumes or corrodes plants, more or less, *according to the degree of its causticity;* and in one of those states, (viz. quick or caustic,) it is used to destroy useless or noxious vegetation. But caustic lime cannot long remain on the ground or exposed to air, without passing into a carbonate and becoming mild.

Suppose a given quantity of lime is wanted for a given area of land; there are advantages in employing highly caustic lime, because it is lighter, and will manure more soil, pound for pound, than mild lime. Limestone, in burning, generally loses from thirtyfive to forty per cent of its weight, and if while yet in its most caustic state it is spread upon the soil, it recovers at least its original weight (some writers say somewhat more,) while lying where it has been spread; and is then and there

* See Letters of Agricola, and Mr Pickering's Address to Mass. Agr. Soc. N. E. Farmer, vol. 1. page 218.

† Davy's Agr. Chemistry.

ready and willing to perform its good offices, by yielding from time to time a part of its substance, both of lime and carbon, to the wants of vegetation.* In other words, place sixty pounds of hot lime directly from the kiln, in a field where you wish to use it for manure, and then let it become mild by exposure to air and water, (either or both,) and your sixty pounds will have become somewhat more than one hundred pounds. Therefore, one of the advantages in using hot lime consists in its being of lighter carriage in proportion to its power as a manure, than mild lime. "A ton of limestone," says Dr Cooper, in Willich's Domestic Encyclopedia, "ought to be reduced in the kiln to 1100 weight, otherwise it is not sufficiently burnt. It will gain two thirds of the lost weight by exposure to air for a week or ten days."

The paragraph of Professor Eaton's (quoted above by B.) in which he says, "four times the quantity of ground limestone is required to equal quick lime," &c, the latter being more durable, appears to us very strange—indeed, incomprehensible. Ground limestone is lime saturated with carbonic acid; quick lime is lime deprived of carbonic acid by heat; but the latter is hourly acquiring the state of the former. Ground limestone is carbonate of lime, and quick lime is pure lime *in transitu*, or on its way to the same state. The former *is* 6, the latter is *becoming* half a dozen.—Ground limestone will last longer than pulverized quick lime, *because it is less efficacious while it does last.* Quick lime is more easily and more completely comminuted, and presents more surface to the action of its solvents, than ground limestone; and the former is therefore sooner efficacious, and its efficacy is less lasting. Loudon says, that "machines for pounding limestone have been erected [in Great Britain,] but the effect of the powder so obtained, both as a manure and for cement, is so much inferior to that of burnt lime, that they have long since been laid aside." *En. of Agr.* p. 562. Other writers, however, speak highly of the efficacy of pulverized limestone as a manure.

We have scarcely room or leisure at present, to remark on some other points and assertions of Mr B., to which we cannot yield assent. That air contributes to the nourishment of plants by yielding its gasses, particularly its carbonic acid gas to their use, is a fact in which we thought all theorists were agreed. Sir Humphrey Davy says, "The principal consumption of the carbonic acid in the atmosphere, seems to be in *affording nourishment to plants*; and some of them appear to be supplied with carbon chiefly from this source."—Carbon is not the only "nutritious matter" which vegetables receive from the atmosphere. The leaves of living plants appear to act upon the aqueous vapor of the atmosphere, in its elastic form, and to absorb it. Some vegetables increase in weight from this cause, when suspended in the atmosphere and unconnected with the soil; such are the house-leek and different species of the aloe. Water is likewise absorbed from the soil, and that soil is said to be most fertile which has the greatest power to absorb water.† Instead, therefore, of an "occult process to convert carbonate of lime into atmospheric air," it seems that atmospheric air is converted into carbonate of lime, or at least yields its carbon and water to quick lime, which is thus made a carbonate, and the latter in its turn supplies plants with those indispensables to vegetation.

We have room for but a word or two in reply to the "agricultural quackery" of which we are accused. It consists in our having stated that "neither unleached ashes nor lime in a caustic state, should in any case come in contact with seed corn or young plants." Dr Deane, in his N. E. Farmer, in speaking of unleached ashes as manure, said, "If they be spread upon ground which has tender plants, it should be done just before a rain, which will dissolve and soften their acrimony. For tender plants, when the weather is dry, will be apt to be injured by them; *at least if they are in contact with the stems or leaves.*" And with regard to lime in a caustic state, Sir John Sinclair says, "A new method of burning without fire has lately been discovered. This consists in substituting quick lime for fire. The lime in its most caustic state, fresh from the kiln, is laid on the vegetable surface to be consumed; and before it is weakened by exposure to the air, a quantity of water, just sufficient to put it in powerful action, is applied," &c. We will also make use of the shield of Sir Humphrey Davy, "quick lime," he observes, "in its pure state, whether in powder or dissolved in water, is injurious to plants. I have in several instances *killed grass by watering it with lime-water.*" But it is only in its most virulent state of causticity, that lime destroys vegetation.

* Lime is soluble in water in the proportion of one part of the former to about 750 of the latter. It is owing to this solubility that the water in limestone countries becomes *hard*, and that rivers embedded in limestone cut their channel so deep.

† Agr. Chemistry, Lec. iv. v. and vii.

Sportsman and Conquerer.

THESE Horses will stand the ensuing season, at the Ten Hills Stock Farm, in Charlestown, two and a half miles from Boston, on the Medford turnpike; for particulars, see late Nos. of the New England Farmer, and Bills. They are confidently recommended to the public by the subscriber. SAMUEL JAQUES.

Ten Hills Stock Farm, May, 1832.

Sportsman's get may be seen on the farm.

Horse Pioneer.

PIONEER will stand for Mares the ensuing season at the following places: at the cattle fair hotel, in Brighton, every Saturday, P. M., and Monday (except the 25th June,) through the season; at Warren's in Framingham, Tuesday, P. M.; at Eastabrook's in Worcester, on Thursday—returning, at Grafton on Friday, A. M. and arrive at Framingham the same evening, and at Framingham the 25th and 26th of June.

Pioneer is a dark bay, full fifteen and a half hands high, ten years old this spring, is a horse of remarkable fine figure, temper and action, and a sure foal getter; was sired by the imported horse Debash, out of a fine mare by Cub, own by Gen. Van Rensselaer of Albany. Persons wishing to improve their breed of horses, are requested to call and examine for themselves. He is pronounced by good judges not to be inferior to any horse in the State. That the public generally may avail themselves of the services of said horse, he will stand at the moderate terms of $6 the leap, $10 the season, or $15 to insure. JOHN PELTON.

Brighton, June 13, 1832. 3t

Situation Wanted.

A married man from Scotland, who has been in this country but a few months, wants a situation as manager of a farm or otherwise. His wife would take care of a dairy, if desirable. Apply at this office.

June 13.

Boy Wanted.

A faithful lad of about 14, who has a good education and of a turn to make a good salesman, may hear of a good situation in this city, by applying at the Farmer office. His board and a suitable compensation for his clothes will be given him. June 13.

PRICES OF COUNTRY PRODUCE.

		FROM	TO
Apples, russettings,	barrel	5 00	6 00
Ashes, pot, first sort,	ton	103 00	106 00
pearl, first sort,	"	109 00	112 00
Beans, white,	bushel	90	1 00
Beef, mess,	barrel	12 50	13 00
prime,	"	8 00	8 50
Cargo, No. 1,	"	8 00	9 00
Butter, inspected, No. 1, new,	pound	12	13
Cheese, new milk,	"	8	9
skimmed milk,	"		3
Flaxseed,	bushel	1 12	1 25
Flour, Baltimore, Howard-street,	barrel	5 75	6 00
Genesee,	"	6 00	6 25
Alexandria,	"	5 50	5 75
Baltimore, wharf,	"	5 25	5 50
Grain, Corn, Northern,	bushel	58	60
Corn, Southern yellow,	"	55	58
Rye,	"	85	90
Barley,	"	87	1 00
Oats,	"	45	48
Hay,	cwt.	65	70
Hog's Lard, first sort, new,	"	9 00	10 00
Hops, 1st quality,	"	22 00	23
Lime,	cask	1 15	1 25
Plaster Paris retails at	ton	3 25	3 50
Pork, clear,	barrel	16 00	18 00
Navy mess,	"	13 00	14 00
Cargo, No. 1,	"	12 75	13 00
Seeds, Herd's Grass,	bushel	3 00	3 50
Red Top, northern,	"	87	1 00
Red Clover, northern,	pound	12	13
Tallow, tried,	cwt.	8 50	8 75
Wool, Merino, full blood, washed.	pound	45	50
Merino, mix'd with Saxony,	"	55	65
Merino, ¾ths, washed,	"	40	42
Merino, half blood,	"	37	38
Merino, quarter,	"	33	35
Native, washed,	"	33	35
Northern pulled. Pulled superfine,	"	55	56
1st Lambs,	"	44	45
2d, "	"	35	37
3d, "	"	28	30
1st Spinning,	"	42	44

Southern pulled Wool is about 5 cents less.

PROVISION MARKET.

Beef, best pieces,	pound	11	13
Pork, fresh, best pieces,	"	8	10
whole hogs,	"	6½	7
Veal,	"	6	7
Mutton,	"	4	10
Poultry,	"	9	12
Butter, keg and tub,	"	12	14
lump, best,	"	14	16
Eggs, retail,	dozen	12	15
Meal, Rye, retail,	bushel		92
Indian, retail,	"		75
Potatoes,	"	62	75
Cider, (according to quality,)	barrel	4 00	5 00

BRIGHTON MARKET—Monday, June 25, 1832.

Reported for the Daily Advertiser and Patriot.

At Market this day 209 Beef Cattle, (including 36 unsold last week,) 14 Cows and Calves, 1671 Sheep and Lambs, and 710 Swine. About 20 Beef Cattle remained unsold at the close of the market.

Prices. *Beef Cattle*—The quality of cattle was better than last week, but prices averaged about the same. We quote for three or four extra yoke at $6 75; prime at 6 a 6 50; good at 5 25 a 5 75; thin at 4 75 a 5 25.

Cows and Calves.—We noticed sales at $17, 20, 24, 30 and 32.

Sheep—Lots of Lambs with a few old sheep were taken at $1 62, 1 75, 1 80, 1 92, and 2 25; weathers at 2 92, 3 00, 3 25, and 3 50.

Swine—No sales were noticed, about all reported remain on hand close of the market.

New York, June 23.—Market this week well supplied with stock. Sales low and at reduced prices. 600 beef cattle have arrived, and of these 100 remain over. The average of sales this week, is one dollar per hundred less than last. We quote beef cattle 5 50 a 7 50 per hundred.

Sheep and Lambs; from 1000 to 1500 have arrived. Sales tolerably brisk, for sheep $2 a 4 50; lambs 1 75 a 3 50. Swine; what few arrive sell alive at 4 a 4 50; dressed at 5½ a 6½.—*Daily Adv.*

Miscellany.

FOR THE NEW ENGLAND FARMER.

THE FARMER'S SONG.

I envy not the mighty king
  Upon the splendid throne —
Nor crave his glittering diadem,
  Nor wish his power mine own:
For though his wealth and power be great,
  And round him thousands bow
In reverence — in my low estate
  More solid peace I know.

I envy not the miser — he
  May tell his treasure o'er,
May heaps on heaps around him see,
  And toil and sigh for more;
I'd scorn his narrow, sordid soul,
  Rapacious and unjust;
Nor bow beneath the base control
  Of empty gilded dust.

Let warriors mount fame's giddy height,
  Gain glory's gallant mead —
Be calm, collected in the fight,
  Where thousands round them bleed;
I envy not their victor wreath,
  Their courage nor their fame;
Their laurels are a fleeting breath,
  Their glory but a name.

My wants are few, and well supplied
  By my productive fields,
I court no luxuries besides,
  Save what contentment yields;
More pure enjoyment labor gives,
  Than wealth or fame can bring;
And he is happier who lives
  A FARMER than a king.

CLEAN BEDSTEADS.

We copy the following directions for cleaning bedsteads, from the New Haven Register. The method appears to be novel — at least we have never seen the same directions in print before; and we think with the writer, that those who will take the trouble to follow them, may be pretty certain of comfortable beds for the rest of the season. The common method of attacking the vermin in bedsteads with *hot water*, is entirely useless; it will neither destroy the bug nor its eggs. Painting the bedstead with verdigris, or washing it with spirits of turpentine, are not only inefficacious but almost as lothesome as the insect.

Directions. — If your bedsteads are already populated with those animals, scald them (the bedsteads) with *boiling vinegar*. The mortices and tenons should be held a minute in the hot vinegar, and upon all places where the eggs are deposited the hot liquid should be suffered to remain about a minute, or to run over them that length of time. The bed-cord should be taken out and dipped in the boiling vinegar.

This will destroy not only the *bugs* but the *eggs;* the acid of the vinegar eating off the lime that constitutes the shell of the egg. This operation should be performed upon all the bedsteads in the house, *at the same time*. To prevent waste of the vinegar, a large kettle or tub should be placed so as to catch the vinegar as it is poured on. Remember that the vinegar should be *boiling hot*.

But this will not prevent the bugs from again infesting the bedsteads, if any should happen to have hid themselves in the bedclothes, or in the cracks of the floor or of the partition. To prevent them from again populating the bedsteads, it is necessary to brush over the bedsteads lightly with the following wash: —

Alcohol, half a pint; spirits of turpentine, half a pint; camphor, half an ounce — mix together. The articles may be had at the apothecaries or druggists, and will cost a shilling. The above quantity is sufficient for four bedsteads. I use a painter's brush to put on the wash; but a few bristles tied together will do as well. The whole of each bedstead should be touched lightly with the wash. It dries instantly and is agreeable in its smell, and possesses the advantage of not soiling or staining the bedding or curtains, though freely applied even to them.

If the bedsteads are not old, not much infested with the insects, the wash above mentioned will be sufficient without scalding with vinegar; both, applied in succession, are absolutely infallible, in the worst cases. If thoroughly performed, not a bug will ever appear in the house again, unless brought there in other bedsteads.

STEAM CARRIAGES.

A committee of the British House of Commons, after instituting a minute inquiry into the subject of steam carriages for the purpose of draughts on common roads, come to the following conclusions:

1. That carriages can be propelled by steam, on common roads, at an average rate of ten miles per hour.
2. That at this rate they have conveyed upwards of fourteen passengers.
3. That their weight, including engine, fuel and water, and attendance, may be under three tons.
4. That they can ascend and descend hills of considerable inclination, with facility and safety.
5. That they are perfectly safe for passengers.
6. That they are not, (or need not be,) if properly constructed, nuisances to the public.
7. That they will become a speedier and cheaper mode of conveyance, than carriages drawn by horses.
8. That as they admit of greater breadth of tire than other carriages, and as the roads are not acted on so injuriously as by the feet of horses in common draught, such carriages will cause less wear of roads, than the ordinary vehicles drawn by horses.
9. That on some roads tolls have been imposed which would be prohibitory of their being used.

A SABBATH EVENING.

How delightful is the stillness of a Sabbath evening; I never enjoy the delights of such a time without feeling grateful, that the wise God of the universe has given us one day out of the seven, in which we have time to meditate upon his perfections, and to send our thoughts forth in the contemplation of another and a better existence. The Sabbath has had a sensible effect upon the affairs of men; in fact, it is necessary to his very existence. If our thoughts were always fixed upon this world and the things of it, how few of us would ever prepare for a better; it is therefore necessary, that a particular time should be set apart for this particular object. But on a Sabbath evening all nature seems to enjoy repose; there is no noise to disturb us, nothing to occupy our attention, no sports; the sound of the hammer is hushed, and the ploughman's voice. All that we hear is now and then the distant bell, telling the hour of prayer, sounding forth its sweet notes upon the still air, and resting like spirits upon the ear. The pathway is filled with persons in pairs, winding their way to church, to meet with God in his temple! Oh, who would give up his blessed day, who does not feel that God has consecrated it. Doubtless, when he makes his second appearance, it will be on the Sabbath. Let us then consecrate the Sabbath evening to his service, that when he comes, he may find us ready to meet him in the heavens.—*Virginia Farmer.*

The Home of a Poetess.—The Boston Transcript contains a letter from Hartford Conn., which says: "I must not omit telling you that we passed half an hour in roaming over the romantic gardens and woodlands, that surround the residence of Mrs Sigourney. Her husband, who is himself a man of letters and taste, has ornamented his estate with everything that can render it desirable, as the home of talent and genius. I do not wonder that Mrs Sigourney has written so much exquisite poetry. The muses must be her frequent companions; for if, as it is fabled, they sometimes condescend to visit the planet earth, they can never return to the fairy land without having fanned their wings in the breezes, which sigh around her romantic bowers."

Cholera.—It is stated in the London papers, that at Masselburgh, in Scotland, the authorities, after the appearance of the cholera, adopted the plan of fumigating the streets, lanes and houses, with chlorine, raised from sea salt and maganese by means of sulphuric acid; and it is worthy of remark, that from the commencement of this operation the disease rapidly diminished in number of cases and in virulence, so that in eight days it had entirely ceased at Fisherrow.

One *today* is worth two *tomorrows.—Franklin.*

Horse Quicksilver.

QUICKSILVER will stand this season at the stable of the subscriber, in Brighton, a few rods south of the meeting-house, and will cover only twenty mares the present season, at $15 each, and $1 in addition, to the groom. Mares warranted to be in foal, if $20 is paid, and $1 to the groom; and in discharge of warranty, the $20 will be returned.

Quicksilver is a beautiful bright bay, three years old; his sire, Sir Isaac Coffin's horse, Barefoot, conspicuous in the racing calendar of England; his dam, Rebecca, from the imported Cleveland bay horse Sir Isaac, and Sky Lark, a native mare, well known for her fine form, speed, and bottom, once owned by Mr Leavitt of Salem, to whom persons are referred for her character, and will be to many others in Massachusetts and Maine. Quicksilver is thought by good judges to combine with great symmetry and delicacy of form, bone, muscle, and all the requisites for a first rate covering horse. Mares sent to him, and if left with the subscriber, will be well attended to on reasonable terms, but he will not be responsible for accidents. BENJAMIN W. HOBART.

Brighton, June 13, 1832. tf

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